

REMARKS

Claims 1, 26 and 37 were amended. Support for the amendment can be found throughout the specification, for example, p. 14, lines 25-28. Claims 1-3, 12-13, 26, 27, 31-33, and 37-39 are pending. No new matter has been added.

Priority

The Examiner contends that the disclosures of earlier Application Nos. 09/160,458 and 60/101,046

fail to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. § 112 for one or more claims of this application. Application No. 09/160,458 (now U.S. Patent 6,617,583) fails to disclose HgS, HgSe, HgTe, InN, or AlAs and U.S. provisional application 60/101,046 fails to disclose HgS, HgSe, HgTe, MgTe, InN, AlAs, AlS, or Pb.

Office Action at 3. Applicants respectfully disagree. Provisional Patent Application No. 60/101,046 discloses MgTe (see specification at p. 8, line 27) and AlS (see specification at p. 6, line 26). Applicants have amended claims 1, 26 and 37 to remove HgS, HgSe, HgTe, InN, AlAs, and Pb from the claims. Applicants believe that the full breadth of the claimed subject matter is entitled to the benefit of the priority of earlier Application Nos. 09/397,432, now U.S. Patent No. 6,602,671 (filed September 17, 1999), 09/160,458, now U.S. Patent No. 6,617,583 (filed September 24, 1998) and 60/101,046 (filed September 18, 1997). Such benefit is respectfully requested.

Claim Objections

The Examiner has objected to claims 1, 26 and 37 for improper status identifier (claim 26) and improper connective (claims 1, 26 and 37). Claims have been amended as Examiner has suggested and renders the objections moot.

Rejection under 35 U.S.C. § 102(e)

Chee

The Examiner has rejected claims 1-3, 12-13, 26-27, 31-33 and 37-39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,544,732 to Chee et al. ("Chee"). See Office Action at 5. Claims 1, 26 and 37 are independent.

As discussed above, the claimed subject matter is entitled to the benefit of U.S. Patent Application Serial No. 09/160,458, filed on September 24, 1998 and Provisional Patent Application No. 60/101,046, filed on September 18, 1997. These dates precede the filing date of Chee which is May 20, 1999. Accordingly, Chee does not qualify as prior art under § 102(e). Applicants therefore request reconsideration and withdrawal of the rejection.

Weiss

The Examiner has rejected claims 1-3, 12-13, 26-27, 31-33 and 37-39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,207,392 to Weiss et al. ("the '392 patent"). See Office Action at 6. The Examiner argues that "the semiconductor nanocrystal can be encased in glass or the semiconductor nanocrystals can be within pores of carriers (i.e. support)." See Office Action at 6. Applicants respectfully disagree. Claims 1, 26 and 37 are independent.

The specification defines a "solid support" as "an insoluble material to which compounds are attached during a synthesis sequence" (see page 28, lines 8-9 of the specification). The specification further provides examples of solid supports as including pellets, disks, capillaries, hollow fibers, needles, pins, solid fibers, cellulose beads, pore-glass beads, silica gels, polystyrene beads optionally cross-linked with divinylbenzene, grafted co-poly beads, polyacrylamide beads, latex beads, dimethylacrylamide beads optionally crosslinked with N--N'-bis-acryloylethylenediamine, and glass particles coated with a hydrophobic polymer (see page 28, lines 14-19 of the specification). The Examiner contends that "the features upon which the applicant relies (i.e., to which compounds are attached during a synthesis sequence) are not recited in the rejected claim(s)." See Office Action at 7. Claims 1, 26, and 37, as amended, recite the relied upon features.

Furthermore, the '392 patent does not describe a support associated with more than one population of semiconductor nanocrystals. The glass coating described in the '392 patent is associated with one nanocrystal only, not with more than one population of semiconductor nanocrystals (see the '392 patent at col. 7, lines 26-31). Unlike the claimed support, the glass

coating in Weiss does not provide a material to which compounds are attached but provides a surface on the nanocrystal that will readily associate with the linking agent (see the '392 patent at col. 7, lines 18-36). In other words, the coating described in the '392 patent is not a support.

Finally, the Examiner refers to the semiconductor nanocrystals that can be within "pores of carriers" and these carriers are considered supports (see Office Action at 6). Applicants respectfully disagree that the carrier is a support. Additionally, the description in the '392 patent of nanocrystals that can be within "pores of carriers" is not entitled to the filing date of November 25, 1997. The '392 patent is a continuation-in-part of U.S. Patent Application No. 08/978,450, filed Nov. 25, 1997, which is now U.S. Patent No. 5,990,479 to Weiss et al. ("the '479 patent"). However, the '479 patent makes no mention of carriers or pores of carriers. That subject matter is entitled only to the continuation-in-part filing date, i.e., March 1, 1999.

As discussed above, the claims are entitled to the benefit of both U.S. Patent Application Serial No. 09/160,458, filed on September 24, 1998, and Provisional Patent Application No. 60/101,046, filed on September 18, 1997. These dates precede the March 1, 1999 filing date of the '392 patent. Accordingly, the description of semiconductor nanocrystals that can be within pores of carriers is disqualified as prior art.

Thus, the '392 patent does not disclose all elements of claims 1, 26 and 37. Accordingly, claims 1, 26 and 37, and the claims which depend therefrom are not anticipated by Weiss. Applicants respectfully request reconsideration and withdrawal of this rejection.

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CONCLUSION

In light of the foregoing amendments and remarks, Applicants respectfully submit that all requirements for patentability are met and ask that all claims be allowed. Please apply any charges or credits to deposit account 19-4293.

Respectfully submitted,

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